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March 13, 1929

DB 19

WORK PLAN
FOR DEVIL'S GARDEN EXTERMINATION EXPERIMENT
SEASON 1929
MODOC NATIONAL FOREST

In the fall of 1928, a small area on the Devil's Garden District of the Modoc National Forest (Timbered Mt.) was located and examined as a possible location for a western pine beetle extermination experiment. After a survey of the region (reported in October 1928) it appeared that in many ways the area was ideal for such an experiment, and plans for carrying it out were considered and approved by the Bureau of Entomology and the Forest Service.

The plans for 1929 contemplate cleaning up all the infestation on the four most heavily timbered sections of the area, as a preliminary step toward complete extermination. The area will then be watched and recleaned at later dates as needed.

Amount of Work to be Done During Present Season

(a) Period of Work. Approximately April 15 to May 1. Road conditions may present some difficulties at this time, but it is felt advisable not to postpone the work any later for fear of some emergence of beetles.

(b) Estimated Number Trees to be Treated. Last fall the number of trees to be treated was estimated at not over 60, with about 800 board feet per tree. With the proportion of winter loss which showed up on the Badger Springs area as a basis, the loss on this area should not be over 20 trees. It will be best, however, to figure on a basis of 60 trees.

(c) Area to be Covered. The four sections of heavier timber should be treated (T 45 N, R 11 E, Secs. 8, 9, 16 and 17), with a total of about 2000 acres.

(d) Number of men. To do this work within the allotted time will require six men.

(e) Probable Cost. Total of $400 (exclusive of regular salaries and contributed equipment). Cost per tree $6.66. Cost per M.B.M. $8.33.

The cost per tree and per M.B.M. will be high on account of the heavy cost of establishing camp and cruising in proportion to the small number of trees to be treated.

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Woodbury
Lyons
Person
Keen
Hastings

The Spotting Work.

A three-man spotting crew, consisting of Hastings, Wagner and one helper, will first need to spot the four sections by running strips twice through each forty. In addition, about one day should be spent in general scouting through the scattered stand bordering the project to pick up any evident infestation.

A very close marking should be made and every tree containing live broods of the western pine beetle, mountain pine beetle and Ips should be marked for treatment. Trees in which less than 75% of the brood have emerged should also be taken.

The total time required for this work will be six days.

The regular forms used by the bureau will be supplied for record purposes. These will include tree tags, spotting records, section plats and progress report map and form.

The Treating Work

Following the marking the trees will be treated, using the regular method of felling and burning the bark. All treated trees will be encircled with a fire line, even though there is snow on the ground, to avoid any hold-over fires. Brush will be disposed of by piling it on top of the upper trunk and burning it with the infested bark. Stumps will be cut to 14 inches or lower. Stumps should be left outside the fire line. Trees under 16 inches d.b.h. can be cut into lengths, piled and burned without peeling; over 16 inches the top of log should be peeled.

General Plan of Organization

Since this is primarily an experimental project the bureau will take charge of the work, and only call on the Forest Service for such assistance as they can provide without interfering with their regular activities, with which the Modoc is more than fully supplied at the present time. Since the Forest Service has set up a fund for the field expenses, it will simplify matters if this can be disbursed through the Supervisor's office.

Organization of Camp

Mr. I.J. Hastings will have charge of the work and will be assisted in the spotting by Mr. Al Wagner. They will plan on arriving in Alturas before the fifteenth, and hire one helper familiar with compass and bug work and one general roustabout as camp helper and cook. They will proceed to the area on the fifteenth, set up camp as close as possible to the work and plan on hauling water from Boles Spring. In view of the probable conditipn of the roads, it may be necessary to hire horses and a wagon to haul in the camp and supplies.

The first week will be spent by the three men in spotting the area after it is definitely known how many trees will require treatment. Hastings can go to Alturas and hire enough men to finish the treating work within a week or ten days. (Two trees per man per day is the average rate of treating.) If sixty trees are found it will require three men to finish the job in the specified time., If less trees are found, one or two additional helpers will be all that is required.

The wages to be paid will be decided by Hastings and the forest supervisor, to be in line with what is being paid in the locality for common labor.

Transportation

The bureau will furnish its Chevrolet one-ton truck for use on the job, but teams may be necessary to reach the area in April; these will have to be hired locally.

Equipment Needed

Tents, truck and tools can for the most part be furnished by the bureau. A few gaps in the list, including three saws and d.b.axes, can probably be supplied by the forest supervisor, so that very few items will need to be purchased.

Subsistence

Supplies will be purchased in Alturas through the forest supervisor's office. It may be necessary to put out bids for the first order.

Estimate of Cost*

Salaries (temporary help) -	$200
Subsistence- - - - - - - - -	100
Transportation- - - - - - -	50
Miscellaneous- - - - - - - -	50
Total - - - -	$400

*Over and above regular salaries and equipment furnished.

Submitted by:

F. P. KEEN,
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Approved by: March 13, 1929.

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